

What is Claimed:

1. A method for searching data in an electronic device comprising:
 - storing a plurality of first character strings and corresponding second character strings;
 - receiving a query; and
 - searching the stored character strings responsive to the query by receiving a character, appending said character to previously received characters if any, performing a prefix search of received characters on the stored second character strings, and returning a set of first character strings stored with the second character strings that match the prefix search.
2. The method of claim 1, further comprising receiving one of the first character strings, and generating the corresponding second character string.
3. The method of claim 2, wherein the receiving the first character string comprises:
 - (A) receiving an input character;
 - (B) appending said input character to previously received input characters if any;
 - (C) repeating steps (A) and (B) for each additional character received.
4. The method of claim 2, wherein generating the second character string comprises:
 - mapping a first set of characters to a second set of characters; and
 - building the second character string from the second set of characters using the mapping and the first character string.
5. The method of claim 4, wherein each of the characters in the second set of characters corresponds to an input point on an input device, and each of the characters in the first set of characters corresponds to a letter of an alphabet.
6. The method of claim 4, further comprising storing the mapping as a table.
7. The method of claim 6, wherein the storing as a table comprises:
 - storing each of the characters in the second set of characters in a respective row in a first column of the table; and
 - storing an associated subset of characters of the first set of characters in a respective row in a second column of the table.
8. The method of claim 1, wherein receiving the character comprises:

receiving input from an input device; and
determining the character from a set of characters that corresponds to the received input.

9. The method of claim 8, wherein the input device comprises a plurality of input points, wherein each input point corresponds to a unique subset of an alphabet.
10. The method of claim 1, further comprising repeating the steps of appending, performing a prefix search, and returning the set, in response to receiving a further character.
11. The method of claim 1, wherein returning the set of first character strings comprises displaying the set of first character strings corresponding to the second character strings that match the prefix search on a display device.
12. The method of claim 11, further comprising:
 - receiving a first character string selection of the set of first character strings shown on the display device; and
 - displaying the set of character strings stored with the first character string selection on a display device.
13. A computer-readable medium having stored thereon computer-executable instructions for performing a method for searching data in an electronic device comprising:
 - storing a plurality of first character strings and corresponding second character strings;
 - receiving a query; and
 - searching the stored character strings responsive to the query by receiving a character, appending said character to previously received characters if any, performing a prefix search of received characters on the stored second character strings, and returning a set of first character strings stored with the second character strings that match the prefix search.
14. The computer-readable medium of claim 13, further comprising computer-executable instructions for receiving one of the first character strings, and generating the corresponding second character string.
15. The computer-readable medium of claim 14, wherein the receiving the first character string comprises computer-executable instructions for:
 - (A) receiving an input character;

- (B) appending said input character to previously received input characters if any;
- (C) repeating steps (A) and (B) for each additional character received.

16. The computer-readable medium of claim 14, wherein generating the second character string comprises computer-executable instructions for:

mapping from a first set of characters to a second set of characters; and
building the second character string from the second set of characters using the mapping and the first character string.

17. The computer-readable medium of claim 16, wherein each of the characters in the second set of characters corresponds to an input point on an input device, and each of the characters in the first set of characters corresponds to a letter of an alphabet.

18. The computer-readable medium of claim 16, further comprising computer-executable instructions for storing the mapping as a table.

19. The computer-readable medium of claim 18, wherein the storing as a table comprises computer-executable instructions for:

storing each of the characters in the second set of characters in a respective row in a first column of the table; and

storing an associated subset of characters of the first set of characters in a respective row in a second column of the table.

20. The computer-readable medium of claim 13, wherein receiving the character comprises computer-executable instructions for:

receiving input from an input device; and

determining the character from a set of characters that corresponds to the received input.

21. The computer-readable medium of claim 20, wherein the input device comprises a plurality of input points, wherein each input point corresponds to a unique subset of an alphabet.

22. The computer-readable medium of claim 13, further comprising computer-executable instructions for repeating the steps of appending, performing a prefix search, and returning the set, in response to receiving a further character.

23. The computer-readable medium of claim 13, wherein returning the set of character strings comprises displaying the set of first character strings corresponding to the second character strings that match the prefix search on a display device.

24. The computer-readable medium of claim 23, further comprising computer-executable instructions for:

receiving a first character string selection of the set of first character strings shown on the display device; and

displaying the set of character strings stored with the first character string selection on a display device.

25. A data searching system, comprising:

a storage device for storing a plurality of first character strings and corresponding second character strings;

an input device for receiving a query;

a display device for displaying a set of character strings; and

a processor for searching the stored character strings responsive to the query by receiving a character, appending said character to previously received characters if any, performing a prefix search of received characters on the stored second character strings, and providing to the display a set of character strings stored with the second character strings that match the prefix search.

26. The system of claim 25, wherein the processor receives the first character strings from the input device, and generates the second character strings corresponding to the first character strings.

27. The system of claim 26, wherein the processor is adapted to receive the first character string by (A) receiving an input character; (B) appending said input character to previously received input characters if any; and (C) repeating steps (A) and (B) for each additional character received.

28. The system of claim 26, wherein the processor generates the second character strings by mapping a first set of characters to a second set of characters, and building the second character string from the second set of characters using the mapping and the first character string.

29. The system of claim 28, wherein each of the characters in the second set of characters corresponds to an input point on the input device, and each of the characters in the first set of characters corresponds to a letter of an alphabet.

30. The system of claim 28, wherein the storage device comprises a table for storing the mapping.

31. The system of claim 30, wherein the table comprises:

 a respective row in a first column of the table for storing each of the characters in the second set of characters; and

 a respective row in a second column of the table for storing an associated subset of characters of the first set of characters.

32. The system of claim 25, wherein the processor determines the character from a set of characters that corresponds to the received input.

33. The system of claim 25, wherein the input device comprises a plurality of input points, wherein each input point corresponds to a unique subset of an alphabet.

34. The system of claim 25, wherein the processor repeats the steps of appending, performing a prefix search, and returning the set, in response to receiving a further character.

35. The system of claim 25, wherein the display device displays the set of first character strings corresponding to the second character strings that match the prefix search.

36. The system of claim 35, wherein the input device receives a first character string selection of the set of first character strings shown on the display device, and the display device displays the set of character strings stored with the first character string selection.